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2003 JUL 15 PM 3:10  
EPA REGION 8  
SUPERFUND BRANCH

July 9, 2003

Mr. Jim Christiansen  
United States Environmental Protection Agency  
Region 8      Ref: 8EPR-SR  
999 18th Street - Suite 300  
Denver, CO 80202-2466

RE: Richardson Flat Monthly Status Report for June 2003

Dear Mr. Christiansen:

This monthly Status Report details site activities conducted at Richardson Flat for June 2003.

**Sampling Activities Conducted:**

Nature and extent surface water and sediment samples were collected in the wetland and pond areas (Figure 1). Six (6) surface water samples were collected on June 3, 2003. One duplicate surface water sample was collected for QA/QC purposes. Twenty sediment samples were collected on June 4, and June 5, 2003. Two duplicate sediment samples were collected for QA/QC purposes. A water elevation and flow direction survey was conducted on July 3, 2003 in the wetland area (Figure 2). These data were collected as recommended by the Biological Technical Assistance Group (BTAG). The data will be used to determine where to focus additional sampling to fulfill the data gaps identified in the Screening Ecological Risk Assessment.

**Results:**

Sample locations are presented in Figure 1. Surface water sampling results are presented in Table 1. Sediment sample results are presented in Table 2. The data presented in the tables was received electronically from the laboratory, final hard copies of the laboratory reports will be submitted with a Technical Memorandum discussing the data.

**Planned Activities: July 2003**

RMC will continue to work on documents and field activities as required to complete all required work at the Site. Additional ecological sampling in the pond and wetland areas will begin after the nature and extent data is reviewed.

**Planned Activities: August 2003**

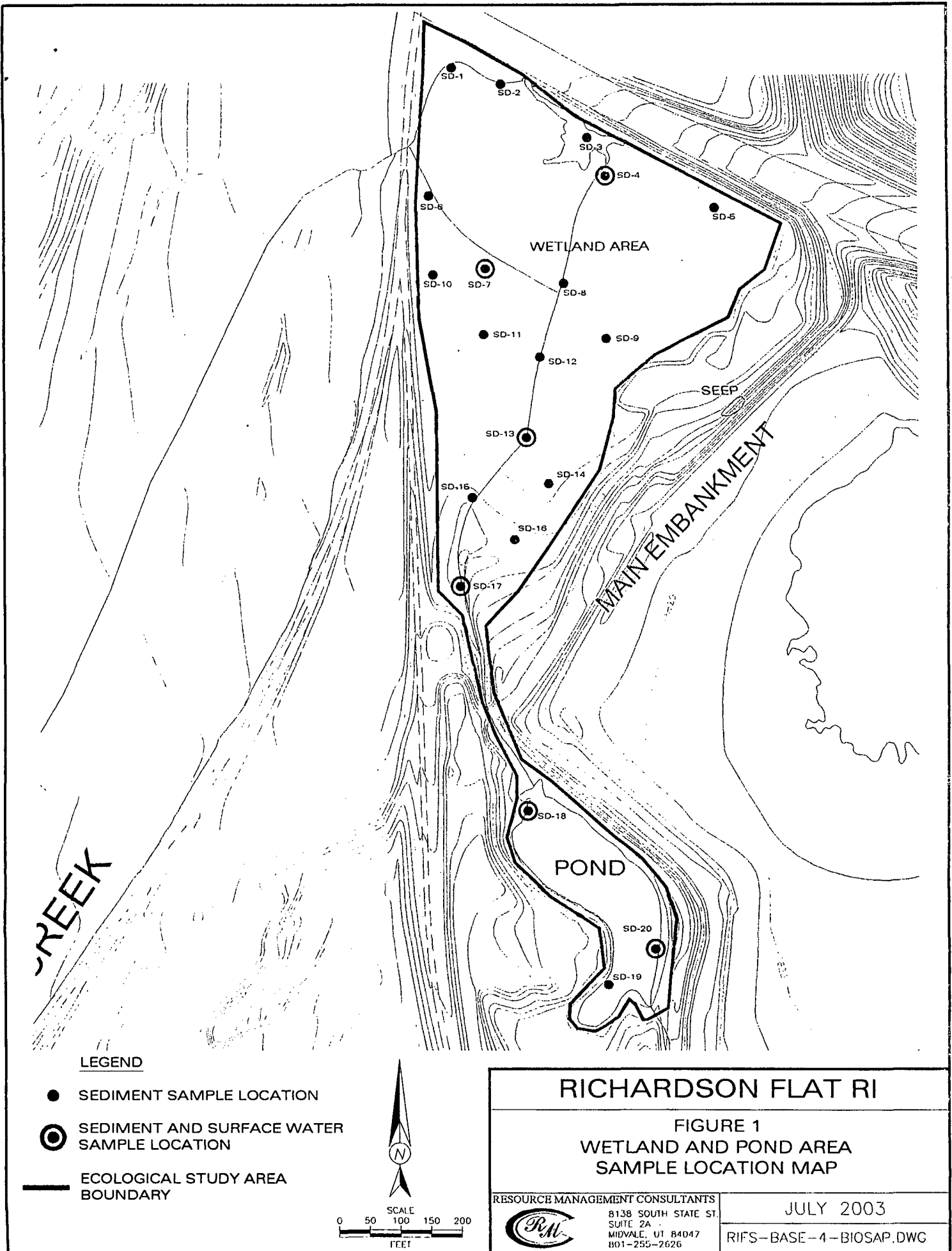
RMC will continue to work on documents and field activities as required to complete all required work at the Site.

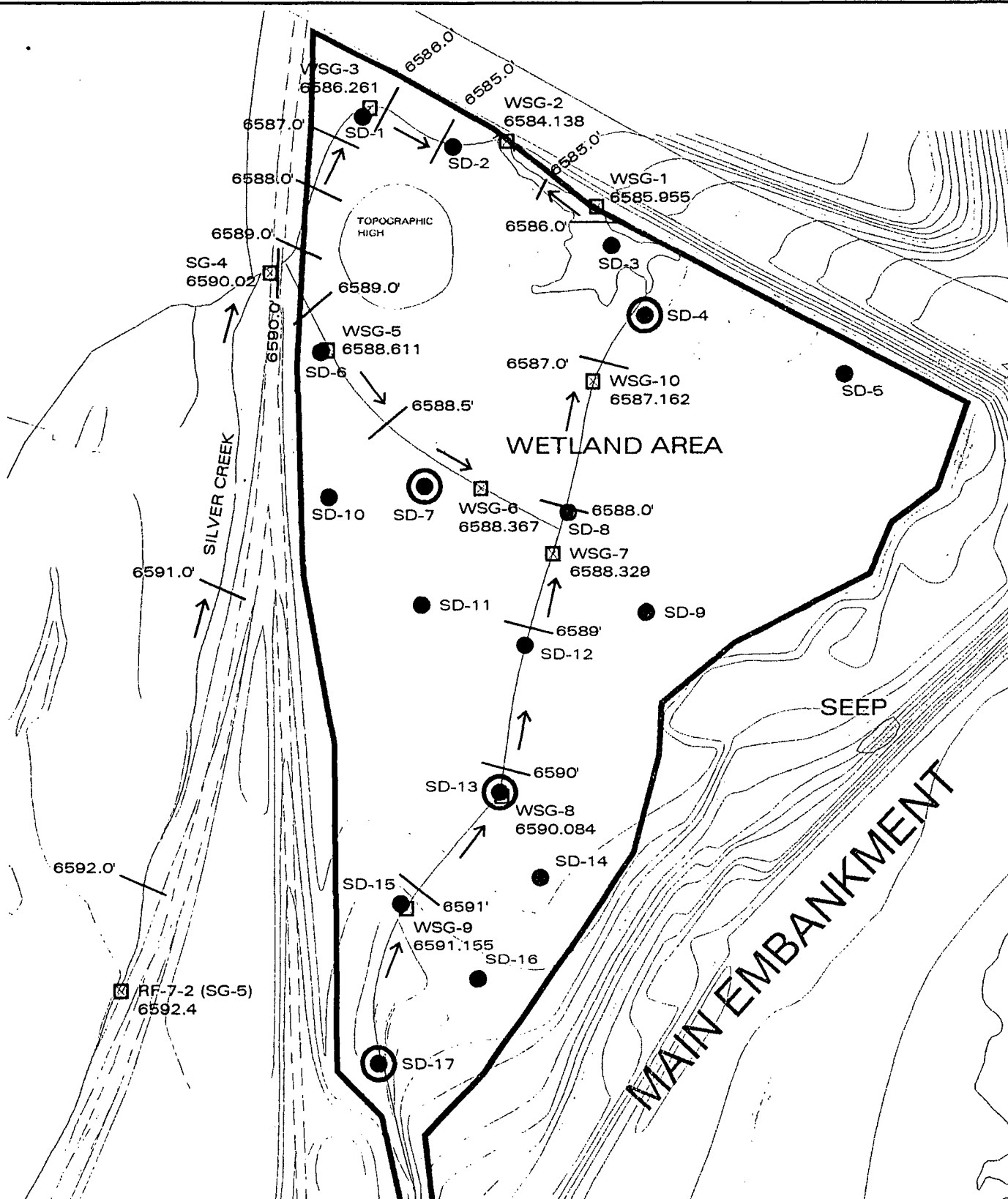
If you should have any questions or comments, please contact me at 801-255-2626.

Best regards,

Todd Leeds  
RMC

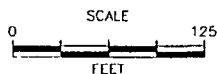
Cc: Kerry Gee, Kevin Murray, Dale Hoff, Dan Wall, Christine Cline, Jeff Montera,  
Susan Griffin, Muhammed Slam, Lynn Woodbury, Exponent





#### LEGEND

- SURFACE WATER SURVEY POINT
- SURFACE WATER ELEVATION CONTOUR (FEET)
- SURFACE WATER FLOW DIRECTION
- SURFACE WATER SAMPLE LOCATION
- SEDIMENT SAMPLE LOCATION
- ECOLOGICAL STUDY AREA BOUNDARY



## RICHARDSON FLAT RI

### FIGURE 2 SURFACE WATER CHANNEL FLOW DIRECTION MAP

RESOURCE MANAGEMENT CONSULTANTS



8138 SOUTH STATE ST.  
SUITE 2A  
MIDVALE, UT 84047  
801-255-2626

JULY 2003

RIFS-BASE-4-BIOSAP.DWC

Table 2. Richardson Flat Analytical Results Summary.  
2003 Wetland Area Sediment Sampling  
units ppm

Date	Sample #	AG	AL	AS	BA	BE	CD	CO	CR	CU	FE	HG	MN	MOIST.	NI	PB	PH	S=	SB	SE	TL	V	ZN
4-Jun-03	RFB-SED-SD01	30.5	6700	159	173	0.3	52	15	38	255	40300	3.69	2290	39.1	21	3200	6.6	63	67	9.2	4.5	12	13400
4-Jun-03	RFB-SED-SD02	30.3	11200	202	55	0.5	98	17	49	438	49900	4.74	1910	54.2	23	4800	6.5	113	58	12.1	5.8	22	14500
4-Jun-03	RFB-SED-SD03	35.3	17800	137	146	0.8	55	14	33	457	29500	1.49	6710	69	20	2490	6.6	1359	52	6.7	8.7	34	13200
4-Jun-03	RFB-SED-SD04	56.5	15100	356	208	0.5	58	17	44	563	36000	3.62	3730	56.4	29	5280	6.5	324	72	8	11	27	9340
4-Jun-03	RFB-SED-SD05	56	15600	235	274	0.5	36	10	27	416	37200	3.2	3900	59.1	18	3360	6.6	32	73	8	11	20	9720
4-Jun-03	RFB-SED-SD06	40.6	6760	447	91	0.3	62	97	21	643	59900	1.36	3490	71.5	16	3920	6.7	823	109	8.2	21	7	22600
4-Jun-03	RFB-SED-SD07	44	24200	422	337	1.2	72	19	42	598	42100	4.02	2730	69.7	30	5240	6.7	824	66	9.8	6.5	48	12100
4-Jun-03	RFB-SED-SD08	28	12200	333	137	0.4	83	8.9	28	509	35700	1.23	3460	86.6	16	4430	7.3	1086	73	8.7	15	18	11100
4-Jun-03	RFB-SED-SD09	31.2	11630	188	146	0.4	24	9	25	418	18800	1.14	6870	85.4	21	3520	6.9	131	103	8.6	21	16	11000
5-Jun-03	RFB-SED-SD10	56	15500	261	200	0.4	53	26	39	505	33200	3.84	10800	53.6	29	5850	7.2	3925	80	7.5	<2.5	25	9460
5-Jun-03	RFB-SED-SD11	56.3	6500	208	224	0.5	37	4.3	24	613	13900	2.06	1740	83.7	14	5860	5.8	303	169	11.9	12	13	6330
5-Jun-03	RFB-SED-SD12	42.3	4700	248	243	0.2	78	14	68	523	17700	3.23	2390	46.1	32	5240	6.8	1114	127	10.6	15	9	9560
5-Jun-03	RFB-SED-SD13	17.2	5530	104	156	0.2	42	12	54	218	17000	1.05	4090	34.9	24	2480	6.9	1722	45	4.8	7.1**	11	7190
5-Jun-03	RFB-SED-SD14	19.1	6030	118	138	0.2	47	11	39	218	23800	1.21	4500	24.3	19	2430	6.7	1231	43	6.8	<5.0*	10	7490
5-Jun-03	RFB-SED-SD15	26.6	8090	119	28.7	0.2	29	9.9	16	724	55600	0.54	7080	76.5	9	2430	7.3	695	67	6.9	<2.5*	9	6580
5-Jun-03	RFB-SED-SD16	20.9	5020	118	527	0.2	34	30	56	124	21100	0.33	61500	43.3	35	1510	8.1	1066	29	3.5	<20**	14	10600
5-Jun-03	RFB-SED-SD17	35.7	14500	265	90.9	0.4	52	9.9	17	327	46700	0.94	2020	71.9	13	3320	6.5	2594	97	7.5	8.1**	16	15600
5-Jun-03	RFB-SED-SD18	25.7	6010	55	1490	0.3	6.8	28	46	27	8480	0.05	161000	68.9	28	250	7	<20	27	1.1	<40**	14	9150
5-Jun-03	RFB-SED-SD19	6.95	17100	36	149	0.5	7.3	12	41	145	20400	0.61	1060	35.9	24	1040	7	2165	15	2.8	<2.5	23	2380
5-Jun-03	RFB-SED-SD20	10.6	12000	50	128	0.3	8.1	9	25	126	16800	0.78	625	66.9	14	1170	7	680	28	4.9	3.7	16	2430
5-Jun-03	RFB-SED-SD21	10	12300	59	119	0.3	12	12	42	181	24100	1.18	818	56.9	22	1520	6.8	734	23	4.9	<2.5	19	2370
5-Jun-03	RFB-SED-SD22	3.77	9460	50	148	0.4	7.1	13	28	81	20500	0.06	4880	70.2	20	455	6.9	660	15	2.8	5.9	22	2790

Notes:  
Sample RFB-SED-SD504 is a duplicate of RFB-SD04  
Sample RFB-SED-SD5019 is a duplicate of RFB-SD19

Table 1. Richardson Flar Analytical Results Summary,  
2003 Wetland Area Surface Water Sampling

units: mg/l

Date	Sample #	AG	AG(D)	AL	AL(D)	ALK	AS	AS(D)	B	B(D)	BA	BA(D)	BE	BE(D)	CAN(D)	CAT/A M BAL	CD	CD(D)	CL	CN	CO3	CO	CO(D)	COND	CR	CR(D)	CR+6(D)	CU	CU(D)	FE	FE(D)	HARD	HCO3	HG	HG(D)	K(D)	KJEL-N D	MQI	MN	MN D	MA	MA D	NO3/ NO3	P	Pb	Pb(D)	PH	SB	SB(D)	SE	SE(D)	SO4=	TDS	TOC	TSS	ZN	ZN(D)
3-Jun-03	RFB-SW-SD4	<0.005	<0.005	<0.050	<0.050	200	0.006	0.007	<0.10	<0.10	<0.10	<0.10	<0.005	<0.005	207	1.2	<0.001	<0.001	156	<0.004	<2.0	<0.10	<0.10	1554	<0.010	<0.010	<0.005	0.006	0.005	0.24	<0.10	719	200	<0.0002	<0.0002	<2.0	<0.50	49	0.81	0.56	65	0.24	0.13	<0.10	<0.005	7.6	<0.005	0.007	<0.004	<0.004	476	1141	4.9	<1.0	0.71	0.87	
3-Jun-03	RFB-SW-SD7	<0.005	<0.005	0.063	<0.050	180	0.006	<0.005	<0.10	<0.10	<0.10	<0.10	<0.005	<0.005	155	2.5	0.003	<0.001	187	<0.004	<2.0	<0.10	<0.10	1401	<0.010	<0.010	<0.005	<0.005	<0.005	1.1	<0.10	539	180	<0.0002	<0.0002	<2.0	<0.50	37	0.91	0.34	82	<0.10	<0.10	<0.005	<0.005	<0.004	260	839	3.8	5.3	1.1	0.62					
3-Jun-03	RFB-SW-SD13	<0.005	<0.005	<0.050	<0.050	186	<0.005	<0.005	<0.10	<0.10	<0.10	<0.10	<0.005	<0.005	282	3.6	<0.001	<0.001	128	<0.004	<2.0	<0.10	<0.10	1784	<0.010	<0.010	<0.005	0.007	0.006	0.14	<0.10	922	189	<0.0002	<0.0002	2.8	<0.50	65	2.3	2.2	55	<0.10	<0.10	<0.005	<0.005	<0.004	611	1451	4.9	3.2	0.051	0.023					
3-Jun-03	RFB-SW-SD17	<0.005	<0.005	<0.050	<0.050	177	<0.005	<0.005	<0.10	<0.10	<0.10	<0.10	<0.005	<0.005	251	4.8	<0.001	<0.001	106	<0.004	<2.0	<0.10	<0.10	1742	<0.010	<0.010	<0.005	0.007	0.006	0.13	<0.10	866	177	<0.0002	<0.0002	3.2	<0.50	63	2.2	2	54	0.12	<0.10	<0.005	7.6	<0.005	<0.005	<0.004	595	1384	6	4.7	0.039	0.012			
3-Jun-03	RFB-SW-SD18	<0.005	<0.005	<0.050	<0.050	148	<0.005	<0.005	<0.10	<0.10	<0.10	<0.10	<0.005	<0.005	230	3.2	<0.001	<0.001	117	<0.004	<2.0	<0.10	<0.10	1674	<0.010	<0.010	<0.005	0.007	0.006	0.12	<0.10	830	148	<0.0002	<0.0002	2.3	<0.50	62	1.9	1.8	55	<0.10	<0.005	7.6	<0.005	<0.005	<0.004	580	1391	6.4	7.3	<0.010	<0.010				
3-Jun-03	RFB-SW-SD018	<0.005	<0.005	<0.050	<0.050	148	<0.005	<0.005	<0.10	<0.10	<0.10	<0.10	<0.005	<0.005	230	4.4	<0.001	<0.001	121	<0.004	<2.0	<0.10	<0.10	1677	<0.010	<0.010	<0.005	0.007	0.006	0.12	<0.10	834	148	<0.0002	<0.0002	2.3	<0.50	63	1.9	1.8	56	0.14	<0.10	<0.005	7.5	<0.005	<0.005	<0.004	562	1353	7	5.2	<0.010	<0.010			
3-Jun-03	RFB-SW-SD20	<0.005	<0.005	<0.050	<0.050	144	<0.005	<0.005	0.1	<0.10	<0.10	<0.10	<0.005	<0.005	237	5	<0.001	<0.001	127	<0.004	<2.0	<0.10	<0.10	1691	<0.010	<0.010	<0.005	0.006	0.006	0.14	<0.10	855	144	<0.0002	<0.0002	2.4	<0.50	64	1.9	1.8	58	<0.10	<0.005	7.6	<0.005	<0.005	<0.004	569	1354	7.2	4.7	<0.010	<0.010				

Note:  
Sample RFB-SW-SD018 is a duplicate of RFB-SW-SD18